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ABSTRACT

This guide is designed to provide private industry councils (PICs) with information on developing workplace literacy or job-related basic skills programs. Chapter 1 contains an overview of the nation's literacy problem and how it affects business and is designed to provide PIC members with background information to use when discussing the problem with members of their communities. It covers such information as a definition of workplace literacy and legislation affecting literacy initiatives and programs. Chapter 2 covers the elements of a successful workplace literacy program and PICs' potential roles in providing some of them. Chapter 3 discusses literacy skills assessment, a potential service for PICs to provide to clients and employers. It includes the legal issues involved in assessing worker skill levels as well as points to consider in selecting assessment instruments. Chapter 4 highlights successful PIC workplace literacy efforts from around the country. It contains information on funding sources PICs can use for workplace literacy programs and includes case studies on how several PICs have developed workplace literacy projects. Appendixes include a 21-item bibliography of selected readings on workplace literacy and a description of the National Alliance of Business' technical assistance capabilities and information on contacts in the alliance's national and regional service offices. (YLB)

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BASIC SKILLS FOR JOB PERFORMANCE:

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Basic Skills for Job Performance:

Private Industry Councils and Workplace Literacy

April 1992

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The National Alliance of Business builds partnerships with government, labor and education to assure quality in the American workforce. The Alliance shapes social policies to improve education and strengthen job training, to develop versatility and to instill values essential to success in the modern workplace.

The Alliance would like to thank the many PIC and state industrial training staff who generously spent time discussing their programs. Without their cooperation, this publication would not have been possible.

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INTRODUCTION

The basic skills needed today for even the most mundane jobs go far beyond what workers ever learned in school. An illiterate employee was once capable of adequate job performance, but not anymore. The "muscle work" jobs of yesterday have either disappeared or been upgraded. This is even more alarming in view of the fact that 75% of the workforce for the year 2000 is already on the job.

Today's workers must be able to read, write and compute at fairly high levels in order to make assessments, solve specific job problems, learn new tasks, and communicate effectively with customers and fellow workers.

A recent survey conducted by the National Alliance of Business revealed that PICs are very interested in workplace literacy. Survey respondents had a number of questions, however, about how PICs could get involved and what sources of funding could be used. This guide answers a number of questions about appropriate roles for PICs in implementing workplace literacy programs. It provides several case examples from PICs around the country, including information about how various programs are structured and operated. The guide provides examples of funding sources that can and are being used to support PIC workplace literacy initiatives. It also provides useful information for PIC members on the key issues surrounding workplace literacy.

The purpose of this publication is to provide PICs with information on developing workplace literacy or job-related basic skills programs. *In this guide, the terms "job-related basic skills" and "workplace literacy" are used interchangeably to mean those basic reading, computation and oral communication skills necessary for success in the workplace.* Workplace Literacy Training is training that is conducted either at the workplace or as an integrated component of an occupational training program.

Workplace literacy programs provide an opportunity for Job Training Partnership Act (JTPA) participants to learn basic skills in an environment where their efforts can have a direct impact on how they perform their jobs. These programs also give Private Industry Councils (PICs) and their service providers an opportunity to extend the services they provide to employers in their communities. In contrast to traditional adult basic education programs, workplace literacy programs use customized materials that relate directly to the workers' jobs. Thus, these programs meet the needs of both participants and employers.

The first chapter contains an overview of the nation's literacy problem, and how if affects business. This chapter is designed to provide PIC members with background information to use when discussing the problem with members of their communities. It covers such information as a definition of workplace literacy and legislation affecting literacy initiatives and programs.

The second chapter covers the elements of a successful workplace literacy program. Potential roles for PICs include providing some of these elements.

The third chapter discusses literacy skills assessment. Included in this chapter are the legal issues involved in assessing worker skill levels, as well as points to consider in selecting assessment instruments. Worker assessments are a potential service for PICs to provide to clients and employers.

The final chapter highlights successful PIC workplace literacy efforts from around the country. This chapter contains information on funding sources PICs can use for workplace literacy programs. It also includes case studies on how several PICs have developed workplace literacy projects. These examples were chosen because they represent a variety of ways that PICs have established roles for themselves in workplace literacy.

There are two appendices. The first is a bibliography of selected readings on workplace literacy for those who wish to pursue more in-depth information on the subject. The second is a description of the National Alliance of Business' technical assistance capabilities and information on contacts in the Alliance's national and regional service offices.

Chapter One:
The Literacy Crisis in the Workplace

The problem of adult illiteracy and low basic skills is precipitating a workforce crisis in our country. Day after day, employers lose money because their employees cannot read, write, compute or communicate well enough to do their jobs efficiently. Workers who cannot read warning signs, who make mistakes preparing or reading written materials or who cause management to lose precious time lecturing on the use of new equipment are all costly--and sometimes dangerous.

Economic conditions are forcing employers to face the consequences of years of not having provided training to lower-level employees. Yet, workers who are formally trained in the workplace achieve at least a 30% higher productivity rate than those who are not.

The lack of adequate literacy and numeracy skills among a large proportion of the the U.S. labor force (both working and non-working) has been a topic of national concern for several years. Many businesses are now having to conduct basic skills tests before even considering an individual for their applicant pool. Employers claim to reject as many as five out of every six applicants because of basic skills deficiencies. Other companies find job upgrading extremely difficult for workers who are deficient in basic skills. This problem is compounded when changes in technology and work organization, such as computer use, teamwork or total quality management, are being implemented.

The notion that high technology requires fewer skills from workers is a myth. In fact, just the opposite is true. In order for an average auto mechanic to repair the newer, computerized automobiles, for example, he must be able to understand 465,000 pages of technical text.

The lack of basic skills in the workforce severely restricts American companies' ability to become high performance work organizations. Without adequate literacy, numeracy and communications skills among employees, it is virtually impossible to implement the teamwork methods necessary for total quality management.

Workers with basic skills deficiencies have become very adept at concealing them. All too often, managers have assumed all their workers knew how to read safety procedures, manuals, work orders and company communications when, in fact, many were relying on co-workers to show them the ropes or "translate" written materials.

Since the majority of tomorrow's workforce is already on the job, improving today's schools is not going to remedy the problem. High school dropout rates are high, and the number of 16-to-24-year-olds entering the labor force in the 1990's will remain low compared to the number entering the labor force in the early 1980s.

Additionally, a high school diploma is no longer proof of basic skills proficiency, nor are grade-level equivalencies reflective of proficiency. When Florida Steel Corporation implemented a basic skills program at a newly-acquired Knoxville plant, the company discovered that 10 of the 60 functionally illiterate employees had actually received high school diplomas.[1]

The status of workplace literacy programs today. The attack on the illiteracy problem is taking place on many fronts. However, these efforts are fragmented. There are volunteer tutor programs. Some companies are contracting with school districts or community colleges to provide adult education programs. Other organizations are implementing in-house programs to address the issues.

The current system for government funding of literacy programs is also fragmented and spread among state and federal agencies. The 1986 JTPA amendments called for an increased emphasis on basic skills for youth, and there is funding for these programs. The U.S. Department of Labor (DOL) has also funded a few national workplace literacy demonstration projects.

Until now, the lead federal funding source has been the Adult Education Act, which provides grants to states to establish adult literacy programs through the state education departments. The U.S. Department of Education recently established the National Workplace Literacy Program to award grants to business-education partnerships.

The National Literacy Act of 1991 calls for developing new initiatives and effectively coordinating available resources in order to expand workplace literacy programs. The Act doubles the authorization for the existing Department of Education Workplace Literacy Partnership Program and establishes a new program within The Department of Education to design and implement national strategies for addressing literacy in the workplace.

Title II of the Act calls for creating a **National Workforce Literacy Collaborative** within the Department of Labor. The purpose of this Collaborative is to assist small and medium-sized businesses, business associations and labor organizations to develop and implement literacy programs tailored to the needs of workers. The Collaborative focuses on improving the skills of people with low basic skills, and limited opportunities for long-term employment and advancement. Generally, the program will be implemented by providing technical assistance rather than financial aid. The Collaborative's goals of most interest to PICs include:

- promoting cooperation and coordination among states, local agencies and the private sector to make maximum use of existing literacy and basic skills training resources;
- providing business and unions with information on research findings and best practices regarding curricula, instructional techniques, training models, and using technology as a training tool; and
- providing technical assistance in helping businesses assess workers' literacy skill needs, in implementing literacy training programs, and in evaluating their effectiveness.

The Act also establishes a National Institute for Literacy jointly sponsored by the U.S.Departments of Education, Labor, and Health and Human Services.[2] The purpose of the Institute is to support research and development programs, identify and validate effective practices, serve as a clearinghouse for disseminating activities, and provide technical assistance to improve the literacy skills needed for productive employment, citizenship and personal and family development.
The National Literacy Act of 1991 has the potential to create an integrated system to help companies make maximum use of the capabilities of existing organizations. It can also help them use the latest techniques in job and literacy analysis to develop workplace literacy programs. Just

as no two companies are alike, their literacy programs will meet different needs and have different objectives.

Because the Act supports programs within both the Departments of Education and Labor, *it may give the PICs an opportunity to apply for new resources to combine with JTPA funds to set up workplace literacy programs*. As noted above, the National Workforce Literacy Collaborative is designed to work with business and labor organizations as a way of reaching small and medium-sized companies. With their numerous established linkages, many PICs are in an ideal position to take advantage of this new program.

Chapter Two:
What Makes A Workplace Literacy Program Successful

"The importance of designing workplace programs and assessing learning in terms of 'functional context' is well established by research . . . But functional context education is a new concept for most literacy and education professionals, indeed for businesses large and small . . . and few of them have the know-how to apply it."

Business Council on Effective Literacy[1]

There is a growing concern among experts that traditional adult literacy programs cannot meet the needs of employers or workers. Many of these programs simply re-create the educational environment in which workers previously failed. A more effective approach has been to relate basic skills learning to the jobs that workers are or will be doing. This is called a "functional context" approach.

In a publication developed jointly for the National Alliance of Business and Simon & Schuster Workplace Resources *(Literacy At Work: The Workbook for Program Developers)*, Jorie Philippi defines the **functional context approach** as "use of actual job materials and simulations to teach the applications of basic oral, reading, writing, reasoning and computational skills to enable individuals to use printed and written information to perform specific job tasks competently."[2]

By using job-related materials, workers can transfer learning directly to job performance. When workers apply what was learned in a program segment, they can see an immediate improvement in their ability to do their jobs. A functional context program usually produces a higher learning curve, higher retention rates and more motivated learners. It also achieves a higher return on investment for employers.

Each workplace literacy program will be different in order to respond to the needs of participants and employers. However, successful programs have certain elements in common. A recently released study--*A Review of the National Workplace Literacy Program,* conducted by Pelavin Associates and the National Alliance of Business--analyzes the results of the first year of the U.S. Department of Education's national program. The report identifies the following key components of successful workplace literacy programs.[3]

- **Active and ongoing involvement by project partners such as business and unions in planning, designing and operating the project.** Business' involvement should include top management, human resources staff, and first-line supervisors. The latter are particularly important in developing job-related curricula, making accommodations for employee release time, and providing support for their subordinates in the program. When unions are present, it is vitally important to involve them in the program design, especially in specifying program objectives.

- **Active and ongoing employee involvement in conducting literacy task analyses and determining worker literacy levels.** A literacy program is usually stronger if expert workers are observed and consulted during preparation for the program. It is important to mobilize employee support since some will have to cover for those in the program if it is done on company time. Involving employees in conducting the literacy task analyses and other program design components also promotes a sense of "ownership" of the program, thus leading to more participation. Note: The name of the program is crucial. The name should have no negative connotations, and the words "literacy" and "basic skills" should not be used. For example, Polaroid Corporation uses "The Technology Readiness Program" and Motorola has "New Directions" programs.

- **Systematic analysis of on-the-job literacy requirements.** An analysis of job responsibilities and the literacy requirements of job tasks is a key ingredient in producing improved job performance through a workplace program. A literacy task analysis includes observing workers on the job, studying manuals and other written materials, and interviewing workers and supervisors. The purpose of the analysis is to determine the basic skills needed to perform well. Once these skills are identified, they serve as the basis for an assessment to determine the "skill gaps"--the differences between workers' current skill levels and those needed to perform well.

- **Developing instructional materials related to the literacy skills required on the job.** Instructional materials need to be customized to incorporate those used on the job. Generic materials are often needed to bring some workers up to the level of the materials. Workers who do not have English as their native language will also require special material until they achieve the proficiency level needed to work on the customized material. Standardized, interactive, computer-based instruction is often appropriate for these groups. However, the majority of program materials should be developed or modified from those used on the job--sections of blueprints, diagrams, forms and instructions for using machinery, for example.

Another study--*Workplace Literacy Efforts in Small Business: Learning from the Field*--found the following key design features in successful workplace literacy programs:[4]

- **Programs should be voluntary because people learn best when they want to learn.** When employees are offered the chance to enhance their skills, they are more likely to actively participate if it is a voluntary decision as opposed to being placed in a program because of a test. Successful voluntary participants are also an effective "outreach" tool to motivate other employees to enroll.

- **An "in-house liaison" should be named as a communications bridge** among the outside specialists, participants and the company's management. This person should be able to communicate effectively with workers, management and expert consultants alike. The liaison serves as an in-house monitor whose functions might include supervising instruction, negotiating with supervisors to secure worker release time, and investigating causes of program participation decline.

- **Representative education and training committees** with members from all levels of the company. These committees have often been used successfully in place of or in conjunction with a staff liaison to monitor and troubleshoot the workplace education program. They are also another effective tool to promote worker ownership of the program.

The National Alliance of Business' Simon & Schuster publication *Literacy At Work: The Workbook for Program Developers* describes the actual process needed to develop a basic skills curriculum within the context of a specific job. The major components of this process are summarized in the box on the next page.

The common thread running through all successful workplace literacy programs is the commitment and involvement of all levels of the organization. In fact, without that commitment and involvement, a program is virtually impossible. Each segment of the organization has a role to play.

Business will need to specify, the quantifiable mathematical, communication and/or computer competencies (both oral and written) that relate to the tasks employees will have as the new work processes are developed. They also need to specify the program's objectives. These might include reductions in absenteeism and turnover, reduced error rate, less scrap and rework, fewer customer complaints and increased worker confidence and self-esteem. A literacy task analysis and the use of work-related training materials will help specify and meet these objectives. Workers are crucial to conducting a thorough literacy task analysis. They are essential to identifying the myriad of skills needed to perform various jobs.

As will be detailed in Chapter Four, PICs can also play a vital role for employers and employees alike in establishing workplace literacy programs. The PICs can assist companies in designing and implementing programs, serve as a resource, and fill the role of impartial liaison.

Major Steps In Developing A Functional Context Literacy Training Program

1. **Employee Needs Assessment.** A needs assessment instrument should be developed from job materials, particularly those related to critical job tasks. The assessment is used as a screening and placement tool to measure the ability levels of potential program participants.

2. **Literacy Task Analysis.** Job tasks are analyzed and broken down into subtasks through observation and interviews. The literacy skill applications are listed for each subtask. The skill applications may refer, for example, to procedural documents, following directions, technical vocabulary, making decisions, categorizing, and formulating questions.

3. **Building Lessons That Show How To Apply Literacy Skills To Job Performance.** An effective lesson plan for adult on-the-job learners includes: a) building motivation by recalling prior related experience; b) building knowledge of new or unfamiliar terms; c) developing thinking strategies used in literacy skill applications; d) providing exercises for guided practice; e) providing exercises for applied practice; and f) summarizing what was learned.

4. **Customized Skill Application Exercises Using Job Materials and Scenarios.** Commercial materials may be used to support learners.

5. **Job Simulation Pre-Test and Post-Test.** These are used to measure the worker's understanding of what has been taught. The pre-test may also be used as a diagnostic tool to determine content areas that individual learners have either mastered or still need to work on. These should be developed after the curriculum is completed.

Chapter Three:
Literacy Skills Assessment and the Private Industry Council

Information about employee literacy is needed by companies to determine whether there is a need for a workplace literacy effort for their employees, to identify the specific literacy skills for which instruction is required, and to evaluate the progress once a program is underway.

Worker assessment serves to determine if a company indeed has a literacy problem, and, if so, the exact nature and scope of the problem. The assessment also provides the basis for the program design. Worker assessment is one of the primary services the PICs can use to generate revenues, extend their contacts, and enhance their credentials with the business community.

This chapter provides PICs with information on the principles of basic skills assessment, legal issues involved, and descriptions of assessment systems currently available for use by PICs and employers.

Unless a company has a well-established literacy program in house, workers are likely to be reluctant to take assessment tests administered by the company. The issue of confidentiality will be the first to surface. Therefore, these assessments are most reliable and effective when conducted by an outside party.

Assessment Validity. It is important that an assessment instrument be valid for the purpose for which it is being used. An instrument valid for predicting a client's performance in a *job training program* may not be valid in predicting a client's performance *on the job.* Or, a worker may be able to repair a machine expertly but be unable to read the instrument designed to test his ability to do so because it is written at a level exceeding his proficiency. Consequently, the choice of assessment instrument and the way it is administered are important.

There are different types of validity.

- **Content validity** concerns "whether the test systematically evaluates a representative sample of the client's behavior in a given area."[1] Basically, a test should test what it purports to test. An instrument to test ability to do fractions, for example, should not have complex word problems of the sort generally used to test reading skills.

- **Criterion validity** concerns an instrument's degree of accuracy in *predicting a certain behavior or skill.* Criterion-related validity must associate a participant's test score with other independent assessment measures for the same skills, such as a supervisor's rating, a teacher's evaluation, or another independent test.[2]

Legal issues in testing. Along with confidentiality, the legality of testing workers will arise almost immediately. There are a number of legal issues affecting the testing of employees and potential employees. As noted above, the validity of an assessment instrument and/or process is one issue. The manner in which programs are implemented forms the basis for other issues.

Title VII of the 1964 Civil Rights Act, which applies to all employers with at least 15 employees,

states that employment-related tests cannot be used as the basis for hiring, training, promotion, demotion or layoff if they have a discriminatory effect on any group (race, sex, national origin or religion). Such tests are illegal even if the employer did not *intend* to discriminate. *Worker Centered Learning: A Union Guide to Workplace Literacy,* published by the AFL-CIO Human Resources Development Institute, summarizes the three-step process for evaluating a test.[3] This process has evolved from two Supreme Court decisions.[4]

Three-Step Process For Evaluating A Test

- **Impact on protected groups.** If no protected group is adversely affected, then the test is acceptable under Title VII. However, if it excludes any group disproportionately, the test must meet the following two additional criteria:

- **Job relatedness.** Is there a correlation between test performance and job performance? The test must be validated to show the connection. A validated test may be acceptable even it if adversely affects protected groups.

- **Business necessity.** Is there a legitimate need for the test? If the test has an adverse impact on protected groups, the employer must show why another non-discriminatory test cannot be used instead.

These principles have been incorporated into the *Uniform Guidelines on Employee Selection Procedures 5*, which have been adopted by the Equal Employment Opportunity Commission, the Civil Service Commission, and the Departments of Labor and Justice. The guidelines cover the entire employee selection process. Where the process itself has no adverse impact, it is not necessary to evaluate the individual components. The guidelines make it clear that "tests for both current and prospective employees must be **job-related and evaluate the person's ability to perform the duties and tasks of the job involved."** Additionally, the guidelines set out acceptable procedures for validation.[6]

A Business Council for Effective Literacy (BCEL) article on "Employers and the Law of Literacy" discusses the circumstances in which employers can make participation in basic skills programs mandatory for job applicants and current employees. If the training program affects an individual's future employment in terms of hiring, retraining, promoting or demoting, then the training program itself must be examined for discriminatory effect (e.g., Title VII provisions apply).[7]

BCEL also covered whether employers can require employees to enroll in basic skills programs on their own time. The Fair Labor Standards Act (FLSA) applies to non-exempt employees. Employers subject to FLSA must comply with the minimum wage and maximum hours of work provisions where participation is outside of working hours. Employers may, under some circumstances, have to pay overtime wages. State and local laws also regulate employee wages and hours.
The Wage and Hour Division of the Department of Labor has interpreted FLSA **as not requiring** employers to pay workers for time spent in training programs if four conditions are met:[8]

- the programs are conducted outside regular working hours

- the program is **not** directly related to the employee's job
- the employee performs no productive work during such attendance
- attendance is voluntary and the employee does not think his/her job or promotion potential will suffer

It should be noted that where a program is developed for the "bona fide purpose of preparing for advancement by upgrading the employees' skill level and is not intended to make the employee more efficient in the present job, the training is *not* considered directly related, even though it may coincidentally improve the employees' skill for the regular job."[9]

This interpretation would appear to exempt employers from paying their employees for participation in workplace literacy programs that are designed to help employees upgrade their skill levels in anticipation of job advancement. However, employers should be aware that programs with worker release time have higher participation and success rates.

At times, PICs may work with businesses that choose to put job applicants through a workplace literacy training program with the guarantee that they will qualify for a job or a subsidized on-the-job training slot if they are successful in the program. The FLSA and related court decisions should be examined before implementing such a program. According to BCEL, "the existence of an employer-employee relationship is determined by the facts and circumstances of the situation . .. an agreement to remain ready to begin a job may itself be considered a state of employment."

Selecting Appropriate Assessment Tests For Workplace Literacy Programs

One of the recommendations of the Pelavin-NAB review is support for developing tests to assess participant literacy levels with instruments geared to the workplace.[10] In the first year of the federal National Workplace Literacy Program, most sites used general tests designed for adult literacy. Examples include the Test of Adult Basic Education (TABE), the Adult Basic Learning Examination (ABLE), and the Wide Range Achievement Test (WRAT). Generally, these instruments were used to assess initial literacy and may have been used to evaluate client progress. However, these tests are designed to test academic knowledge, not workplace competencies.

Because of the validity and legal issues involved, PICs should recommend to businesses validated tests that are job related and meet the needs of the organizations without having an adverse impact on a protected group. Competency-based, criterion-referenced tests meet this need.

A useful publication on tests for basic skills is the May 1988 National Commission on Employment Policy research report, *Using Basic Skill Testing to Improve the Effectiveness of Remediation in Employment and Training Programs for Youth*.[11]

Competency-Based Programs and Criterion-Referenced Tests.[12] Criterion-referenced tests indicate how well an individual performs relative to some specific learning objective (criterion) rather than how well he or she performs relative to other people, as do norm-referenced

tests. Criterion-referenced tests are useful only if they are part of a competency-based educational program.

Competency-based programs permit employers to create their own "Work Skills Report Card." Figure 1 on page 16 illustrates the program components of competency-based and non-competency-based programs. Workplace literacy programs based on learning modules developed through job and literacy task analyses are examples of competency-based systems. The instruction and learning in these systems reflect the *practical achievements considered by employers to be significant and meaningful.*[13] A major advantage of criterion-referenced testing is that it indicates to the employer exactly what competencies have been achieved rather than showing an increase in grade level per hours spent in the program.

Comprehensive Adult Student Assessment System (CASAS). One approach available to PICs is the CASAS. This is a competency-based assessment system. The developers of CASAS call it a "comprehensive educational assessment and curriculum management system." This system provides "day-to-day instructional direction, more general curriculum planning, and ongoing assessment."[14] In the CASAS system, 34 competency areas have been identified and linked to vocational skill competencies. CASAS maintains banks containing over 4,000 test items related to the areas. Since specific items or questions can easily be "withdrawn," the bank permits quick and relatively inexpensive construction of customized tests for given objectives and difficulty levels.

The process is fairly simple. An SDA that provides nurses' aide training, for example, knows that participants must have certain basic skills competencies in order to complete the program successfully. In such a program, a participant might need to be able to understand fractions and the decimal system and be able to interpret information on a prescription label, among other competencies. To assess participants' readiness for the program, the PIC staff would pull out the testing sections from CASAS that deal expressly with the identified competencies--thus creating a customized assessment. After a participant completed the assessment, staff would know whether the participant is ready to enter the program or whether some remediation is needed. If the latter is the case, then staff also knows exactly which skill areas require remediation.

To assist in the remediation process, CASAS has developed a curriculum index that matches every adult competency identified. Once the remediation needs have been identified, the CASAS system can refer staff or service providers to the appropriate material for remediation. This includes print-based, video and some computer-based curricula. These can be used to fill the skill deficiencies identified in the assessment. CASAS is summarized on page 17 in Figure 2.[15]

CASAS Demonstration Project. CASAS is being widely tested by the Project of the States, a demonstration project conducted by the Center for Remediation Design. This project seeks to use CASAS as the basis for developing a criterion-referenced assessment system for JTPA clients in an effort to improve services. Service delivery areas recognize the difficulty of designing proper services when the client population's needs have not been properly assessed.

More than 40 service delivery areas in seven states are participating in the demonstration. At least 50 employers in each state were asked which of their employees used specific math and reading skills and what types of reading materials were used on the job (charts, graphs, prose, etc.). The survey information yielded a series of functional basic skills that were common among entry-level workers but were perhaps used differently from one industry to the next. For instance, most

employers identified the ability to read a chart as one necessary skill. A clerk in a market might need this skill to identify the price per pound of an item. A worker in another organization might be required to read a blueprint.

CASAS and the Center for Remediation Design staff are conducting an item-by-item analysis on those sets of skills identified in each state and matching them to assess items that will test for the functional skills identified and validated by the local labor communities. In general, CASAS has already developed items to test 85-90% of all skills identified by local employers in all the demonstration states.

Using the CASAS competencies, each service delivery area is determining clients' specific skill levels and comparing them to the skills needed to be successful in training and on the job. Clients are placed in one of three categories: pre-employable, nearly employable or employable. Within these three tiers, the criterion-referenced system permits identification of the specific skills a client already has. Therefore, services can be customized to cover the gaps. Two of the PICs in the case studies in Chapter Four use CASAS as part of their assessment process.

The **South Central Kansas PIC** uses CASAS as an assessment tool for a project at Cessna Aircraft Company. The service delivery area also uses CASAS as part of the eligibility determination process for programs under contract to three other local service providers. These programs are directed toward the remediation needs of entry-level employees in LearJet, Inc. and Beech Aircraft Corporation, and a nurses' aide program through the YWCA.

Seattle-King County PIC also uses CASAS. According to surveys of Washington employers, the diagnostic portion of CASAS is close enough to California's that no customization is needed. (The CASAS was developed and extensively tested in California.) However, the appraisal section is being customized because the employability level required by Washington employers is higher. The PIC has staff who are certified in CASAS. The staff provides CASAS-based individualized basic skills remediation in an employment context at the PIC's Learning Center.

Test of Applied Literacy Skills (TALS). This new test is another example of a criterion-referenced assessment instrument. The TALS was developed using the same adult literacy framework as the 1986 National Assessment of Education Progress Young Adult Survey (often called the NAEP scales). They are also the only tests directly comparable to the U.S. Department of Education's new National Adult Literacy Survey and DOL's Workplace Literacy Assessment.

The TALS consists of tests in three areas--prose, quantitative and document. Each area has two forms of the test to facilitate pre-testing and post-testing. The **document test** measures ability to identify and use information located in such materials as charts, forms, tables and indices. The **prose test** measures ability to read and interpret such materials as newspaper articles, magazines, pamphlets and books. Items in the **quantitative tests** consist of mathematical operations, such as calculating wages, completing an order form, or determining the amount of interest from a loan advertisement. It is not necessary to administer all three tests. Assessors can choose which tests are appropriate for a given situation, program or employer.

Each test requires 40 minutes to complete. The score from each test is reported on a literacy profile that consists of a scale with various tasks at specific points on the scale. An individual's score indicates that he has an 80% chance of correctly performing the task(s) listed at that point on the

scale. However, his chances are higher for correctly performing the tasks listed below his score since they are less complicated.

Figure 1: Characteristics of Competency-Based vs Non-Competency-Based Programs

Program Components	Competency-Based Programs	Non-Competency-Based Programs
1. Desired outcomes	Specific, measurable statements; typically at an objective level	Non-specific, not necessarily measurable; typically goal-level statements
2. Instructional content	Outcome or competency-based	Teaches the textbook
3. Amounts of time provided for instruction	Continues until the participant demonstrates mastery	Fixed units of time (semester, term)
4. Mode of instruction	Emphasis on instructor as facilitator of participant performance. Uses a variety of instructional techniques and groups.	Emphasis on instructor presentation
5. Focus of instruction	What the participant needs to learn (especially related to employability and employment)	What instructor is able and likes to teach
6. Instructional materials	Several different texts and media based on the various learning styles of the participants in the program	Single sources of materials (Text and/or workbooks)
7. Feedback on performance	Report results immediately after performance in understandable terms to the participants	Delayed feedback
8. Pace of instruction	Paced to each individual's rate of learning	Instructor or group-paced
9. Testing	Criterion (competency) referenced-test measures participants' progress toward attaining intended outcomes	Norm-referenced--based on relative performance of others
10. Exit criteria	Participant demonstrates the specified competencies	Final tests and grades

California State Department of Education, 1987

Figure 2: CASAS Summary

Test: CASAS Adult Life Skills Pre-Employment Tests

Publisher: Comprehensive Adult Student Assessment System and the San Diego Community College District Foundation
2725 Congress Street, Suite 1-M, San Diego, CA 92110

Norms: Criterion-referenced and competency-referenced tests which provide functional proficiency criteria for competency-based employment-related programs

Administration: May be group or individually administered by trained people. CASAS provides training on test administration and interpretation.

Cost: Depends on the number and type of tests administered.

Subtest Areas: Employability Competency System Appraisal for initial identification of basic reading and math functional skill levels in an employability context.

Survey Achievement Tests:

- at three levels (A, B and C) for monitoring progress in reading
- at two levels (A and B) for monitoring progress in math
- at three levels (A, B and C) for monitoring progress in listening comprehension

All areas are tested in an employability context and alternate forms are available for each level.

There are Certification Tests in an employability context for two levels (B and C) in reading and math for determining level or program completion.

Comment: The CASAS assessment design includes a bank of more than 4000 items that have been extensively field tested throughout California and other states over an eight-year period. Each item is designed to measure a specific competency statement, but also on a continuum of difficulty as a person passes through the program. The underlying common achievement scale based on Item Response Theory allows for better articulation among programs and levels. Individual achievement can be monitored, as well as group progress, because all items have been calibrated on the same scale. The tests are appropriate for native and non-native English speakers functioning from minimal through high school entry-level skill levels.

Chapter Four:
Successful Private Industry Council Workplace Literacy Programs

"We must learn to deliver literacy service in environments where people are performing other important tasks--whether the tasks are training for employment, parenting, or performing a job. We must develop truly contextual learning systems and make those the norm."[1]

This chapter describes reasons for PIC involvement in workplace literacy, outlines funding available, and provides case studies of successful PIC programs.

A recent study of small business workplace literacy programs found that an outside workforce coordinator is needed to get the program started.[2] PICs that have already developed relationships with both companies and service providers are in an ideal position to fill this coordinator role.

JTPA administrators may be hesitant to take a leadership role in coordinating job-related basic skills programs. There seems to be a general perception among staff that JTPA funds cannot be used legitimately for this purpose because workplace literacy programs usually target people who are already employed. However, there are several ways that JTPA can be used to support workplace literacy programs.

For instance, an on-the-job training program for eligible participants can have a job-related basic skills component. A six-month program might have four months split between classroom training on work-related basic skills and on-the-job training and two months of solid on-the-job training. The basic skills component might be taught by a company instructor working with an Adult Basic Education instructor.

An employer who is expanding operations might want the PIC to conduct customized job training that includes a workplace literacy component for eligible participants *before* employees are hired. Those who successfully completed the training would form the labor pool for the new jobs.

PIC staff can provide the coordination and monitoring needed to make such programs successful. A number of PICs have already taken on this role and are coordinating workplace literacy programs for their clients. A few PICs like the one in Seattle-King County have gone further and trained their staffs to conduct job analysis.

PIC use of various funding sources for workplace literacy programs

PICs and their business partners have access to a number of funding resources for developing functional context workplace literacy programs. A combination of funds is generally used. Possible funding sources include:

- **JTPA funds** including Title IIA, education (8%), older worker (3%) and dislocated worker funds. Note that IIA 78% funds may not be used for workers who are already employed except within customized training programs where 78% funds are used in pre-hire activities and OJT.

- **U.S. Department of Labor Workplace Literacy Grants.** The Office of Strategic Planning and Policy Development (in the Employment and Training Administration) has funded a number of projects. Among them are workplace literacy training models, research, assessment and technology evaluation, policy development, and projects for special target groups.

- **U.S. Department of Education's National Workplace Literacy Program** awarded 73 grants totaling $19.3 million in 1991 through its Office of Vocational and Adult Education. The amount will double as a result of the National Literacy Act of 1991. A local match is required.

- **State Adult Education** departments that receive grants for adult literacy under the federal Adult Education Act may support workplace literacy programs.

- **State industrial training funds for economic development.** A recent survey asked the 43 states operating state-funded, employer-specific job training programs whether they are able to support basic skills training programs. Of the 41 states responding with current data, 34 are able to subsidize basic skills training. However, only 21 of them actually spend money for basic skills.

  Although expenditure data must be treated with caution, state estimates of basic skills as a percentage of total expenditures were low since most programs do not maintain records by type of expenditure. North Carolina spends the most at 10%. Pennsylvania, Utah and Virginia follow, spending about 5% of total funds on basic skills. The rest spend less than 5%.[3]

- **Community Development Block Grants** are administered by the Community Planning and Development Department of the U.S. Department of Housing and Urban Development. Funds are granted by formula to community development agencies located in urban areas.

  Requests for block grant funds must be directed to local governments that meet entitlement criteria. Localities are free to develop their own priorities as long as programs and/or activities conform to the federal statutory standards and program regulations. All eligible activities must either benefit low and moderate income people, aid in preventing or eliminating slums and blight, or meet other community development needs that have a particular urgency.[4]

- **In-kind company funds** include release time, space, instructors and job-related materials.

- **Fee for Service** involves direct payment by companies to the PIC or a PIC subsidiary for services in the area of workplace literacy.

Numerous PICs have already begun using these sources of funds in various ways to provide workplace literacy programs. For example:

- The **Altamaha/Georgia Southern PIC** contracts with the Jobs Network Center at Georgia Southern University to operate 14-15 week programs for nurses' aides and for retail and office occupations. The three programs use examples and assignments that are based on the occupations. For this project, the PIC uses Title IIA and JTPA 8% funds.

- The **Houston PIC** is beginning to require basic skills in all JTPA IIA programs. Their Long-Term Clerical Training Program is one instance of combining basic and vocational skills. This program is contracted to a vocational school and is funded entirely by Title IIA funds. It teaches office skills that include basic writing, grammar, vocabulary building, clerical skills, reading comprehension, problem solving, among others.

- **SDA #5 in Pittsburgh, Kansas**, coordinates JTPA 8% funds for functional basic skills projects through an Area Wide Grant. The grant is administered by the Southeast Kansas Education Service Center, which acts as a Clearinghouse Consortium. The Center also relies on an in-kind match from adult basic education (especially community college programs).

The policy guidance roles of PICs in the local systems ideally suit addressing workplace literacy issues as defined locally. The case studies that follow illustrate ways in which five PICs have exercised these policy roles.

Austin/Travis County Private Industry Council (Texas)

This PIC formed a partnership with the University of Texas at Austin (UT), Texas Instruments, IBM and Hart Graphics, Inc.in 1990. The partnership won a U.S. Department of Education Workplace Literacy grant for $342,072. IBM and Texas Instruments contributed $146,602 for a total grant budget of $488,674.

The PIC began the program in May 1991 with proposal writing, finding the business partners and negotiating with them on the program design. As the project progresses, the PIC staff will have a largely administrative role.

However, the PIC is taking an active role in working with UT's Extension/Materials/Instruction Center in its Department of Education. Since academia has traditionally had a different orientation, the PIC's primary function here is helping University staff understand businesses' needs. On the other hand, the PIC Executive Director, Bill Demestihas, has noted that industry has limited knowledge of testing and literacy. Industry is accustomed to hiring from an application and interview and assumes that a high school diploma or associate's degree means the applicant has no basic skill deficiencies. In this case, the PIC is filling its role of building bridges for effective partnerships between the public and private sectors and serving as a liaison.

Demestihas says the PIC's experience gave it a solid foundation to make a valuable contribution to a business project like this one. The PIC has worked to "infuse reality" into the University staff and set up the ground rules to smooth working relationships with industry projects. Demestihas helped UT ask business the right questions to develop materials. He notes that although the businesses were early "to brag" about the project, they originally set narrow criteria for it, and UT was dependent on the PIC to negotiate with Texas Instruments, IBM and Hart Graphics.

At each company, a group of production workers in one kind of job or a job cluster (e.g., Hart Graphics employees in the "binding area") will be assessed. Those without the necessary basic skills will participate in a 15-month training program using a curriculum designed and customized for that job cluster. The test for each company will also be customized in the functional context of the designated jobs.

The companies estimate that 60-70% of their production workers are functionally illiterate. For this program, the plan is to enroll 230 workers--75 at IBM, 125 at Texas Instruments and 30 at Hart Graphics. Training will be mandatory for these workers, and participating employees will be paid. The training will require approximately four hours a week.

In addition to paying the program participants, the businesses are donating space and equipment such as overhead projectors, videotapes, etc. (including personal computers at IBM). An advisory committee is being formed to include a worker from each company as well as management personnel. The PIC has tried to include the union at Hart Graphics, but no union representative had attended meetings as of August 1991.

Finding a program name with no negative connotations was difficult, but they finally selected *Skills Building for Tomorrow.* Testing was conducted in August, and workers were notified of the results by letter. Workers who could be brought up to the readability level of company material within the training period were invited to participate. Those with lower skills were referred to

suitable programs within the community. Workers with higher skills were told they did not need the program.

The *Skills Building for Tomorrow* program, which began in September 1991, includes support services. Individual counseling is available for employees who wish to investigate other educational avenues. The three companies have committed to providing on-site instruction and full work release time for participants so child care and transportation will not be issues.

Recommendations to Other Private Industry Councils

Bill Demestihas notes that it is important to have a clear understanding up front of the roles and responsibilities of each partner. The ground rules must be defined and established. For example, the three companies had agreed to maintaining confidentiality of individual client data. When the testing was completed, however, they wanted to know which workers had scores that were too low for acceptance into the program. The parties involved worked out a compromise: in the letters containing test results, the UT staff suggested that these workers seek assistance from appropriate community organizations.

The business partners' interest is high. Efforts are underway to identify ways to fund the PIC and UT in order to continue the program once the grant runs out.

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Basic Skills Laboratories. The PIC funds Basic Skills Laboratories to complement occupational training that is contracted out to community colleges. To qualify as a laboratory site, colleges have to offer training in four or more occupations in one location, which usually generates enough students for a laboratory. Two colleges qualified as laboratory sites in Program Year 1991. *Skills taught in the lab are customized according to individual assessment and related to an individual's chosen occupational area.*

Clients use the laboratory in one of two ways. Some clients take the basic skills training in conjunction with their occupational training. Clients at lower levels of ability complete the basic skills training before entering the occupational training. The basic skills training enables the participants to be more successful in the occupational training.

In Program Year 1990, approximately $192,000 was allocated for the basic skills centers, while about $4,292,000 of Title IIA funds was allocated to the community colleges for occupational skills training.

Dislocated Workers--Mason Chamberlain plant. This ammunition plant at the Stennis Space Center was affected by Defense Department cutbacks. The PIC used a discretionary dislocated workers grant of $650,000 to set up a **Technical Learning Laboratory**. The laboratory provided computer-assisted basic skills training, as well as basic computer skills training. The basic skills training was a feeder system to customized occupational skills training and served 212 laid-off workers.

Industry-specific training. Title IIA funds are used to offer industry-specific training. This training is geared toward *potential new employees*. The industry/employer or a local community college might provide the training. The SDA generally buys into the state Department of Education program. The employer decides whether this training includes basic skills. In Program Year 1991, $67,847 was allocated to serve 400 JTPA participants.

Senior Skill Training Program. This statewide program is funded directly by the State Employment and Training Division with JTPA 3% Older Worker funds. It is a major program that includes work-related basic skills. The PIC issued the RFP and monitors the program, which has four contractors. The contractors were required to attend a training conference sponsored by the PIC. A total of 197 participants were enrolled in Program Year 1990.

The contractors for this program must be aware of jobs that are appropriate for seniors and those for which there is a demand in the local labor market. They are required to develop individual client vocational goals at the beginning of the program, *design a workplace literacy curriculum and associated learning materials for those vocations*, and then place the clients. Off-the-shelf materials are not permitted. The jobs (front desk clerk, warehouse inventory, etc.) do not require additional skills training after the work-related literacy training has been completed. As part of the training design, the contractors conduct some observations of workers on the job and collect work-related materials, however, they do not conduct detailed literacy task analyses.

Other Statewide Programs. The state is currently using 8% funds for other literacy programs (including volunteer ones) and as part of the Job Skills Education Program. The latter is a computerized functional context basic skills program originally designed for the Army. It has been implemented at Peavey Electronics in cooperation with Meridian Community College. JTPA

eligibles participate in the program. This is one example of how PICs can coordinate with other agencies and programs to access already-existing basic skills services for their clients.

Recommendations to Other Private Industry Councils

The Mississippi Employment and Training Division finds it effective to use a competitive RFP process for its job-related basic skills programs.

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The Private Industry Council of Southern Connecticut, Inc.

PIC Technology Training Center. The PIC operates this center with support from IBM. It is a one-stop training center that provides a combination of basic and job-specific skills and work readiness skills. Participants use a computer-based system for literacy or take program components covering basic skills/GED, office skills, keyboarding and word processing. The center currently has about 100 clients in training, with the number expected to triple over the coming year. Success stories include a former welfare mother who is now making over $20,000 a year at Xerox.

Entering clients are given an assessment and placed accordingly. Clients come from JOBS, JTPA Title IIA, dislocated worker and older worker programs. All clients can access support services as needed. Barbara Stracka, on the PIC staff, notes that :

> "We work with the whole person, and address whatever might stop the trainee from becoming self-sufficient. A pro-active, weekly counseling session is required to tackle barriers. Counseling topics include child care, transportation, business attire, mentoring, housing, life management, crisis management, family planning, and job retention issues. Graduates regularly return for evening support groups to build morale during the transition to the work world. Awards ceremonies also reinforce graduates on the job. Added services as needed are delivered to working graduates for as much as one year after placement."

Programs at the center are funded collaboratively by the state Department of Income Maintenance, JTPA, dislocated worker and older worker funding. IBM has loaned $165,000 worth of computer hardware and software. Six companies who have become Business Partners of the center have also donated more than $20,000. (Company membership is for support purposes and does not necessarily imply that clients will be placed there.) IBM gave an additional $25,000 to pay the wages for some JTPA IIB Summer Youth Program participants to use the center for computer basic skills and work experience. The PIC provides training funds through Title IIA, 3% older worker, and dislocated worker funds.

Henkels and McCoy is a private subcontracting firm that operates one of the JTPA projects funded by the PIC. This program is different from most, however, since it incorporates basic skills into an electronics training program as a "stay in school" project. The project was allocated $175,000 for Program Year 1991 and has been expanded from one site to three.

Bridgeport Jobs and La Opportunidad. These two programs currently represent about 50% of the clients using the PIC Technology Training Center.

> **Bridgeport Jobs** is a model welfare-to-work program that started in 1987. Basic and job-specific skills and life management skills are offered for these programs through the center. Clients are placed in supported on-the-job training positions for three months. During this period, employers pay an hourly fee to the PIC. The PIC pays

the clients' wages. Counseling, case management and employer interface ensure successful transition off welfare. The placement rate from transitional employment is 90%, and 325 clients have moved into jobs.

La Opportunidad is Bridgeport Jobs' Hispanic counterpart. Prior to participating in skills training, a ten-week session takes trainees through computer-assisted literacy training, job seeking, retention skills, life management skills, nutrition, career planning, goal setting and AIDS counseling. When the session ends, trainees go into other center programs, English as a Second Language programs, job training, higher education or directly into jobs.

The PIC Institute--Fee for Service Workplace Literacy. In response to a need identified by the PIC's job developers and marketing manager, the PIC has drafted a plan to run PIC Institutes on workplace literacy for small and medium-sized businesses. A select group of PIC Board members has met to complete the business plan, and the institute is near implementation.

Recommendations to Other Private Industry Councils

1. Know what businesses need and want. Use surveys, interviews and information from board members to keep what you train on line.

2. Direct program operation gives you the opportunity to stay in close touch with the program management and the trainees themselves. Program operation becomes a personal experience when an executive director is able to describe trainees' needs, motives and personal challenges. Stay in touch.

3. Help your trainees to stay in touch. Literacy does not happen in a vacuum. Connect it to learning a job-related skill such as computers or electronics. The motivation for a paycheck will seep into learning the job skill and the literacy skills.

4. Work cooperatively with your public school system. Your training is an enhancement to their current and past students. Include the school system in planning and implementing.

5. Don't be afraid to try something new even if nobody else has done it before you. If it makes sense, try it. Whatever works can be transferred to other programs.

6. Job skills and life management skills must both be a priority.

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South Central Kansas Service Delivery Area (Wichita)

This SDA is involved in workplace literacy through several projects. Three of them are in aviation --a major industry in Wichita--LearJet, Inc., Beech Aircraft Corporation and Cessna Aircraft Company. Another is through the YWCA.

The projects with **LearJet, Beech Aircraft and the YWCA** are work-related remediation programs that precede job-specific training. The two aviation projects involve service providers, while the YWCA functions as the service provider for its program. In these programs, the proposers are responsible for recruiting participants. The JTPA agency then screens for eligibility, which includes administering the CASAS assessment instrument (see Chapter 3). The PIC also uses 8% funds to contract with the vocational education system to administer a specialized assessment instrument.

Although most of the participants enrolled in the two aviation programs tested above the seventh-grade level in reading and math, there were many who needed more intensive training. For those with low literacy levels, the PIC has individual contracts with Adult Basic Education providers to furnish the needed instruction.

A major goal after remediation is placement in skills training or directly in a job. Beech Aircraft conducts employment training for job applicants, then selects from this pool. Acceptance into Beech Aircraft training is considered a major success for a JTPA participant.

The YWCA project is a certified nurses' aide program. The YWCA worked with the vocational educational system to design a competency-based training program of 113 hours of classroom instruction. The curriculum was designed to help successful participants become qualified for additional training or entry-level jobs in the health care industry.

Another major project for this SDA is the **Cessna 21st Training Facility**. The PIC coordinated with the KanWork program to plan a training project for AFDC recipients. KanWork is a JOBS predecessor in the state Social and Rehabilitative Services Department.

In this program, JTPA staff conducts the assessment. Cessna then hires the AFDC recipients under a six-month, on-the-job training contract through a separate training center. For the first three months, the participants spend half their time in work-related remediation and half on the shop floor in on-the-job training. One Cessna employee and a local school district remedial instructor conduct the training. The remedial instructor is loaned to Cessna through a Kansas Industrial Training grant from the state Department of Commerce. The program emphasis is on company-directed remediation--technical reading and math, for example. For the second three months of the contract, participants move into working full time in the production area.

The funding for the Cessna program is varied. JTPA funds pay for the on-the-job training, as well as tool kits for participants. KanWork maintains medical benefits, provides child care and transportation support, and buys safety glasses and shoes for participants. State economic development training funds help Cessna with some of the training costs. Community Development Block Grant funds were used to complete the training site renovation.

Recommendations to Other Private Industry Councils

Earline Wesley, Director of Human Services for the City of Wichita, notes that the program design is critical. In Wichita, with its low unemployment, programs are focused on the hard-core unemployed because everyone else has already been served.

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Toledo Area Private Industry Council (Ohio)

Toledo has operated two workplace literacy programs. One is the UT Jeep Connection project with Chrysler Corporation. This project was funded by the U.S. Department of Education's National Workplace Literacy program. The other is the Education Growth Opportunities in the Workplace project, funded by the state Department of Education.

UT Jeep Connection Program. The PIC coordinated and administered this program in partnership with the University of Toledo's Community and Technical College, the United Auto Workers, Chrysler and the Human Resource Development Center of the University. The latter marketed the program. The technical college conducted the literacy task analyses, developed the curriculum and conducted the training.

The project offered classes in reading, math and writing; all incorporated job-relevant material. GED preparation was offered as well. Classes were held on site on the employees' own time and offered around the clock to accommodate three shifts. Workers could take classes immediately before or after their shifts. Surprisingly, a number of employees went home for meals then returned to the plant for classes.

The program was funded by a U.S. Department of Education Workplace Literacy Grant of $249,979. Chrysler/UAW provided a cash match of $199,500 and in-kind services. Federal funding continued for 15 months, after which Chrysler has continued the program on a fee-for-service basis.

For this program, Chrysler did not conduct an assessment of worker literacy levels. In this instance, the company felt it would have a negative effect on participation. As a marketing tool, the program was also opened to workers' family members.

Chrysler used several techniques to motivate workers to participate. One was the Learning Assistance Center where workers with low-level literacy, called "Apprentice Learners," could take computer-assisted instruction. The computer was the lure. The students often took math, and then later moved into a reading class. Previous participants also assisted in recruiting new participants. This "word of mouth" approach was very effective.

Educational Growth Opportunities in the Workplace (EGOW) Program. The state Department of Education awarded the PIC a community Literacy Grant to work with Owens Technical College in providing workplace literacy services to small and medium-sized employers in a relatively rural area. Owens College has previously operated similar programs.

The $38,843 grant came from the EGOW program. The funds paid for the coordinator who designed and conducted the training. Employers were encouraged to contribute monetary or in-kind support, but were not required to do so. In general, the larger companies fund their programs while the grant serves the smaller companies. In addition to the state education money, the program developers received $15,000 from the Ohio Department of Economic Development for books and materials.

The project targeted primarily hard-to-serve employees with literacy levels ranging from sixth to

eighth grade. The goal of raising 80% of the participants at least two grade levels was met. The program emphasis was on numeracy and problem solving as well as traditional literacy. If there were fewer than ten participants at any one company, they were pooled with participants from another location. Some employers gave work-release time to participate; others preferred to have workers attend on their own time.

The PIC's main role in the EGOW program was administration and funding oversight. Owens College marketed its services and did the literacy task analyses. Assessments were customized for each employer and offered to all employees.

Recommendations to Other Private Industry Councils

Strong coordination between education partners and business partners is extremely important. The PIC should dedicate a staff member to this purpose.

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Appendix II

National Alliance of Business
Technical Assistance Capabilities

National Alliance of Business
Technical Assistance Capabilities

Technical Assistance Services are available to Private Industry Councils through the National Alliance of Business to help you plan and implement your workplace literacy program strategies. The Alliance can help you:

- Develop a policy framework including strategic goals for workplace literacy
- Develop a funding plan for workplace literacy activities
- Create partnerships with local industries to implement workplace literacy programs
- Develop funding applications to state and federal workplace literacy programs
- Conduct workplace literacy briefings for PIC and SDA staff
- Conduct a staff development program in workplace literacy for planners, counselors, job developers, sub-contractors, instructors and marketing staff
- Identify and assess print-based and computer-based workplace literacy training resources
- Design and/or conduct customized job task analyses and assessments
- Design and implement workplace literacy programs
- Evaluate the results of workplace literacy programs in terms of improved retention, job performance and productivity

For more information on workplace literacy technical assistance services, contact NAB's national office in Washington, D.C. or your nearest NAB regional service office.

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